

REMARKS/ARGUMENTS

The Office Action mailed June 1, 2007 has been received and the Examiner's comments carefully reviewed. The Office Action rejected claims 1-20. Claims 1-15 and 17-19 were rejected under 35 U.S.C. 103(a) as being unpatentable over Klassen et al. (U.S. Patent No. 6,711,137) (hereinafter "Klassen") in view of Dillon et al. (U.S. Patent No. 6,473,793) (hereinafter "Dillon"). Independent Claims 1, 7 and 11 have been amended. No new matter has been added. For at least the following reasons, Applicants respectfully submit that the presently pending claims are in condition for allowance.

Claim Rejections

With regard to Claim 1, the Office Action states that Dillon teaches "automatically tuning the size of the TCP receive window on the receiving computing device (hybrid gateway receives the packet and adjusting the window size based on the user bandwidth) based on the determined bandwidth, wherein automatically tuning the size of the TCP receive window comprises setting the size of the current TCP receive window without manual intervention and setting the size of the current TCP receive window sets the number of packets allowed to be sent from a sending computer device to the receiving computing device before an acknowledgment is sent from the receiving computing device to the sending computing device (figures 1 and 14; column 9 lines 39-67; column 10 lines 12-43; column 11 lines 23-35; column 12 lines 4-30; column 16 lines 8-36; column 18 lines 39-50; column 19, line 5 to column 20 line 40; column 21 lines 26-32; and column 22 lines 1-3)." The Applicants respectfully disagree but have amended the claims to more clearly define the invention.

As amended, Claim 1 recites in part "automatically determining a bandwidth of a network connection of a receiving computing device on the receiving computing device; and automatically tuning the size of the TCP receive window on the receiving computing device based on the determined bandwidth; wherein the automatically tuning comprises setting the size of the current TCP receive window directly on the receiving computing device by the receiving computing device without manual intervention and wherein setting the size of the current TCP

receive window sets the number of packets allowed to be sent from a sending computer device to the receiving computing device before an acknowledgment is sent from the receiving computing device to the sending computing device; wherein setting the size of the TCP receive window includes setting a value that is stored on the receiving computing device that is referenced for each TCP connection setup; wherein the value setting the receiving computing device is different from a parameter within a TCP packet that indicates the size of the TCP receive window on the receiving computing device.” Among other differences, Dillon teaches adjusting a packet that is meant for another machine to indicate the TCP window size and does not teach setting the size of the TCP window itself.

Dillon adjusts the throughput of a connection at a gateway device that is located between the source computer and the requesting terminal. Dillon does not adjust the actual size of the TCP receive window. Instead, Dillon adjusts a value that is advertised as the window size by adjusting a parameter that is contained within each of the TCP packets that have already been sent by the source computer. At column 9, lines 39-47, Dillon states “When the hybrid gateway 150 receives the packet, it strips off the tunneling header, revealing the true header with the application server 140 as the destination. The software within the hybrid gateway 150 identifies the packet sender using the source address in the true header. Based on the identity of the packet sender, their segmented level of service, and collected statistics regarding usage history, the advertized window size of the TCP packet is modified, if necessary, to throttle the user's bandwidth.” Nowhere does Dillon adjust a value that changes the size of the TCP receive window on the receiving computing device. Claim 1 clearly states that the TCP window size is set on the receiving computing device by the receiving computing device and is done by adjusting a value that is stored on the receiving computing device. Since the cited references do not teach setting the window size, or setting the window size on the receiving computing device, Claim 1 is proposed to be allowable. Claims 7 and 11 have been similarly amended, albeit differently.

Claim 7 as amended recites in part “determining a network connection device on the receiving computing device; determining a throughput of the network connection device of the

receiving computing device; wherein the receiving computing device is a user device; determining a size to set the TCP receive window based on the determined throughput by accessing a data structure and extracting the size from the data structure based on the determined throughput; wherein the data structure is segmented based on bandwidth of a connection device; wherein the data structure includes at least three different sizes to set the TCP receive window; and wherein the data structure includes sizes to set the TCP receive window for at least three different operating system; automatically tuning the size of the TCP receive window directly on the receiving computing device by the receiving computing device based on the determined throughput of the connection by setting the size of the TCP receive window automatically without manual intervention and wherein setting the size of the TCP receive window sets the number of packets allowed to be sent from a sending computer device to the receiving computing device before an acknowledgment is sent from the receiving computing device to the sending computing device; wherein setting the size is performed by the receiving computing device and involves setting a value within a configuration database that is accessed by the operating system of the receiving computing device; wherein the value for the TCP receive window is referenced when a TCP connection is setup; wherein the value is different from a parameter within a TCP packet that indicates the size of the TCP receive window on the receiving computing device; and determining when the network connection has changed by monitoring a connection of network hardware that is associated with the network connection and when the network connection changes automatically tuning the size of the TCP receive window.”

Claim 7 is proposed to be allowable for at least the reasons presented above. Additionally, Claim 7 includes recitations that are not found in the other claims that is not taught or suggested by the cited references. For example, Claim 7 includes determining the network connection device of the receiving computing device and setting the size of the TCP receive window within a database that is accessed by the operating system when a TCP connection is setup. Claims depending from Claim 7 are proposed to be allowable since they depend from a valid base claim.

Claim 11 as amended recites in part “setting the size of the receive window based on the determined bandwidth without manual intervention and wherein setting the size of the receive window sets the number of packets allowed to be sent from a sending computer device to the

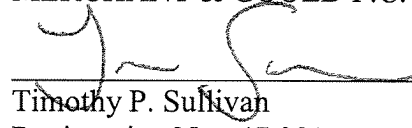
apparatus before an acknowledgment is sent from the apparatus to the sending computing device; wherein setting the size is performed by the receiving computing device and involves adjusting a value that is maintained within a registry on the receiving computing device.” Claim 11 is proposed to be allowable for at least the reasons presented above. Additionally, Claim 11 includes a further limitation that sets the value of the TCP receive window within a registry of the receiving computing device that is not taught or suggested by the cited references. Claims depending from Claim 7 are proposed to be allowable since they depend from a valid base claim.

Conclusion

In view of the foregoing remarks, all pending claims are believed to be allowable and the application is in condition for allowance. Therefore, a Notice of Allowance is respectfully requested. Should the Examiner have any further issues regarding this application, the Examiner is requested to contact the undersigned attorney for the applicant at the telephone number provided below.

Respectfully submitted,

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